Determination and Prioritizing of Addiction Prevention Factors in Delfan City, Iran

Davod Mirzaei[1], <u>Bibi Eshrat Zamani PhD</u>[2], Sayyed Hojat Mousavi[3]

Abstract

Background: In recent decades, drug abuse has been one of the most important problems of human societies and has been imposing enormous charges to them. Exposing addicts to infectious diseases, social and economic harmful impacts, expensive and reversibility of treatment methods have caused that drug abuse prevention programs be more inexpensive and more effective than treatment. One of the most important methods of drug abuse prevention is identification and prioritization of them according to scientific methods. The purpose of this study was to investigate addiction prevention methods among adolescents and teenagers from the viewpoints of addicts, their parents, authorities and prioritizing the prevention methods based on analytical hierarchy process (AHP) model in Delfan city, Iran.

Methods: Statistical samples included 17 authorities, 42 addicts, and 23 parents that have been selected through purposive sampling. Data collection instruments involved structured and semi-structured interviews. Data were analyzed based on quantitative and qualitative methods, encoding and categorization. In this study, AHP model was used for prioritizing the prevention methods. This model is one of the most efficient and comprehensive designed techniques for multi-criteria decision making; it formulates the possibility of natural complex problems as hierarchy.

Findings: The results indicated that the most important methods of drug abuse prevention were using media, case studies, planning for leisure times, educating social skills, integrating drug prevention methods in religious customs and respect to teenagers. Among these factors, the media and respect to adolescents with weights 0.3321 and 0.2389 had the highest preferences for the prevention of drug addiction, respectively. Planning for leisure time with weight of 0.1349 had the lowest importance than media and teenager respectful factor and higher priority than religion customs, dating and learning lessons factors. On the contrary, integrating in religion customs, using case studies with weights 0.1145, 0.1114 and 0.0680 had the lowest preferences, respectively, and can be considered in later settings.

Conclusion: The interviewees mentioned the most important addiction prevention methods in respect to teenagers, religious customs, media, dating skills, learning lessons from examples and attention to the leisure times among which the media has been the most efficient method. Because, publicity of the media as a national media is available to the public and it is not dedicated for a special group or class of people and everyone can use it regardless of his literacy and knowledge level.

Keywords: Addiction, Analytical hierarchy process model, Prioritizing, Prevention methods.

1- MA Student, Department of Education Planning, University of Isfahan, Isfahan, Iran.
2- Associate Professor, School of Education and Psychology, University of Isfahan, Isfahan, Iran.
3- PhD Student, Department of Geomorphology, University of Isfahan, Isfahan, Iran.
Correspondence to: Bibi Eshrat Zamani PhD, Email: bzamani@edu.ui.ac.ir

Introduction

All the human societies are dealing with different problems; these unpleasant problems have forced human's mind to think about new ways to remove, reduce or control them. According to multiple published global reports, addictive drugs are considered as one of the major threatening issues for the human communities which are associated with increasing growth in production, transmission, distribution and consumption.[1,2] This issue currently is considered as one of the four world's crisis (crisis of biological environment destruction, atom, addiction and poverty)[3] as well as one of the health-therapeutic issues of the 21st century.[4] Addiction is defined as a dense mass of the negative results due to drug usage[5] due to which the ability of the society would be destroyed in organizing and maintaining the existing regulations; normal functioning and social life would be impaired and ultimately would cause structural transformations in economical, social, political and cultural system of a community.[3] Nonetheless, today addiction is merely not the problem of the addicts, but problem of the communities; and it jeopardizes the health of all the community people and devastates the cultural, social and economic foundation roots of a society.[6] Thus, almost all the world's countries are trying to plan for solving this problem and minimizing its consequences.[7] In the past three decades, there have been implemented considerable advances in the addiction prevention, particularly identification and dissemination of the information.[8] Therefore, preventive efforts are considered as the first step in dealing with addictive drugs and are an important part in national strategy in this regard.[9] Preventive methods as a collection of measures are carried out by the social sciences and humanities experts based on which psychological-social conditions, which are the cause of physical disorders, mental disease and source of socioeconomic problems, be reduced and adjusted.[10] One of the first and most important ways to prevent from drug abuse is to identify and prioritize them based on scientific methods.

Analytical hierarchy process (AHP) is implemented based on analyzing complicated issues as hierarchy so that the main objective is placed on top of it. In this method, elements of different levels are compared in paired manner

and ultimately would be evaluated based on criteria priority rate and the best alternative would be selected. At the end, consistency and inconsistency of the system also would be reviewed.[11] Prior to presenting this study, it is necessary to discuss some of the studied researches related to drug abuse prevention methods.

Riggs et al. reviewed the effects of addiction preventive programs with parents-based education in metropolises of Kansas, Missouri and Indiana in the United States; results indicated that parents, who had used educational programs towards addiction, had more control toward drug abuse in their children than the control groups.[12] Longshore et al. reviewed the drug prevention methods among the first year high school students in South Dakota and with implementing preventive program using media in the case group and came to realize that tendency toward addictive drugs had significantly been decreased in the case group compared to the past.[13] Faggiano et al. assessed the effectiveness of a school-based substance abuse prevention program aiming to prevent from tobacco, alcohol and drug consumption among adolescents of seven European countries; they concluded that this prevention program had been effective for those who used drugs recreationally and those who did not use; however, it was not effective for those who were the current (daily) and constant abusers.[14] Sloboda et al. reviewed the drug abuse prevention among teenagers of second grade of intermediate school and concluded that the implemented program has prevented from negative effects of alcohol, cigarette and marijuana.[15]

In general, investigating prevention methods is considered as prerequisite of the prevention programs. In other words, prevention means nothing without identifying preventive ways; on the other hand, prioritizing these ways requires proper planning and considering benefit cost issues, because simultaneously it cannot be possible to consider all the factors and they need to be cared based on the priority. It should be noted that first, addiction factors should be investigated; thereafter, based on which and the view of the interviewees, preventive method being discussed. In other words, identifying addiction factors is considered as prevention prerequisite. On the other hand, most of the

studies in this field had been done in major cities while high population residing in rural and small towns require the present study and other studies in these environments. It should be noted that Delfan city has a high percentage of addicts. The objectives of the study included: identifying and determining addiction prevention methods from the view of the authorities, parents and addicts and prioritizing addiction prevention methods using AHP model.

Methods

Qualitative method was used in this study because statistical analysis has been done using analytical hierarchy process. Study population in this study included the drug related officials, the addicts in the addiction withdrawal camps as well as their parents in Delfan City. The subjects were selected based on those who had the highest information in this field using purposive sampling. These subjects were 17 male officials or authorities, 42 addicts in the drug addiction withdrawal centers (camp) and 23 of the parents (males). In other words, the criterion of the number of the subjects and discontinuation of the interviews were based on theoretical saturation. Data collection tools included observation, structured and semi-structured interviews.

Theoretical AHP

Analytical hierarchy process is one of the most efficient techniques for multi-criteria decision making which was presented first by Thomas L. Saaty (1980). This technique has been designed based on paired comparison and would let the possibility of various scenarios to the planners. This technique is one of the most comprehensive designed systems for decision-making with multiple criteria.[16-18] The following steps were done to reach the objectives:

A. Developing a hierarchical structure

A hierarchical structure is a graphical display from real complicated issues on top of which is the main objective and in the next levels, there are sub-criteria and alternatives. In this part, by analyzing complicated problems, in a simple form, they can be changed into a form so that it is consistent with the human mind.[19] Generally, the hierarchical structure may be discussed as one of the following criteria:[20-22]

1. Objective, criteria, sub-criteria, alternatives.

2. Objective, criteria, factors, sub-factors, alternatives.

B. Weighting the factor

In AHP, the criterion of weight per every unit of information is based on the role that unit plays within the layer and the highest weight belongs to a layer which has the maximum impact in determining the objective (Table 1).[23]

Table 1. Weighting the factors based on preference as paired comparison[24]

Preferences (verbal judgment)	Numerical value
Completely preferred or important or desirable	9
Important preference or a very strong desirability	7
Important preference or a strong desirability	5
A little preference or more important or desirable	3
Similar preference, importance or desirability	1
Preferences between strong intervals	2, 4, 6, 8

C. Preparing paired and normalized matrices of the factors

In the nest stage, the values of each of the matrix columns, the paired comparisons were added together and each element in paired comparison matrix was divided to its own column so that it changed the paired comparison matrix to the normalized one (Equation 1). Therefore, the mean of each element in each row was calculated from the normalized matrix that weight vector would be resulted from (Equation 2).

Equation 1: $r_{ij} = \dfrac{a_{ij}}{\sum_{i=1}^{m} a_{ij}}$

Equation 2: $W_i = \dfrac{\sum_{i=1}^{n} r_{ij}}{n}$

In this equation, m = the number of columns, n = the number of rows, aij = normalized matrix numbers per i option and j index and Wi = the weight of the i option.

D. Determining the final score of the factors (priorities and preferences)

To do so, the principle of hierarchical composition, which would lead to vector of priority considering all the judges in all the

hierarchical levels were used[25,26] (Equation 3).

Equation 3: $V_H = \sum_{k=1}^{n} W_k (g_{ij})$

In this equation, VH = final score of j option, WK = weight of each criterion and *gij* = weight of the options in association with the criteria.

E. Calculating consistency or inconsistency of the system

One of the other advantages of AHP is to control consistency of the decision; i.e., always in AHP it can be possible to calculate the consistency rate of decision and judge its goodness, badness, acceptability or unacceptability.

To calculate consistency rate, first paired comparison matrix (A) should be multiplied in weight vector (W) to have an appropriate estimation from λmax W; i.e., A×W= λmax W. With dividing λmax W value on W, the value related to λmax would be obtained. Then, inconsistency index (I.I.) value would be calculated through equation 4:[24]

Equation 4: $I.I. = \frac{\lambda\max - n}{n - 1}$

The inconsistency rate also is calculated through equation 5:

Equation 5: $I.R. = \frac{I.I.}{I.I.R.}$ in which inconsistency index ratio (I.I.R) value also is extracted from table 2.

If inconsistency rate is smaller or equal to 0.1, the consistency of the system would be acceptable and if it is more than 0.1, the decision maker is better to review his/her judgments.[27]

Table 2. Inconsistency index ratio (I.I.R) values of random values

n	1	2	3	4	5	6	7	...
I.I.R*	0	0	0.58	0.9	1.12	1.24	1.32	...

*Inconsistency index ratio

Results

Determining addiction prevention methods

The interviewees mentioned many methods to prevent addiction of youths and teenagers in which the main cases are classified as the following.

Media including TV show programs, radio and press programs; respecting the teenagers including cooperation with young generation, giving responsibilities to them, strengthening teens' confidence, cooperation and fostering a cooperation spirit; learning lesson including holding addiction fight conferences, inviting addicts to express their experiences; planning for leisure time of the teenagers including holding camps and visiting artistic and cultural centers, having plan for leisure time, promoting sport and exercise and providing sport activities for teenagers; religious programs including raising religious beliefs, using the clergies and mosques for training to prevent addiction, establishing a relationship between religious schools with educational centers; dating including training social skills in educational workshops of these skills as well as dating training.

The obtained results from addiction prevention methods through interviewing with the study population are illustrated in table 3.

Prioritizing addiction prevention methods using AHP model

Hierarchical structure which is developed in this study to achieve the objectives includes the following levels (Figure 1):

Level 1, which is on the top of the hierarchy and includes the main objective, i.e., prioritizing addiction prevention methods.

Level 2, which includes criteria level and consists of parents, authorities and addicts.

Level 3, which includes alternatives and Consists of media, learning lessons from examples, respecting the teenagers, leisure time and dating skills.

Table 3. The major methods of addiction prevention from the view of the interviewed individuals

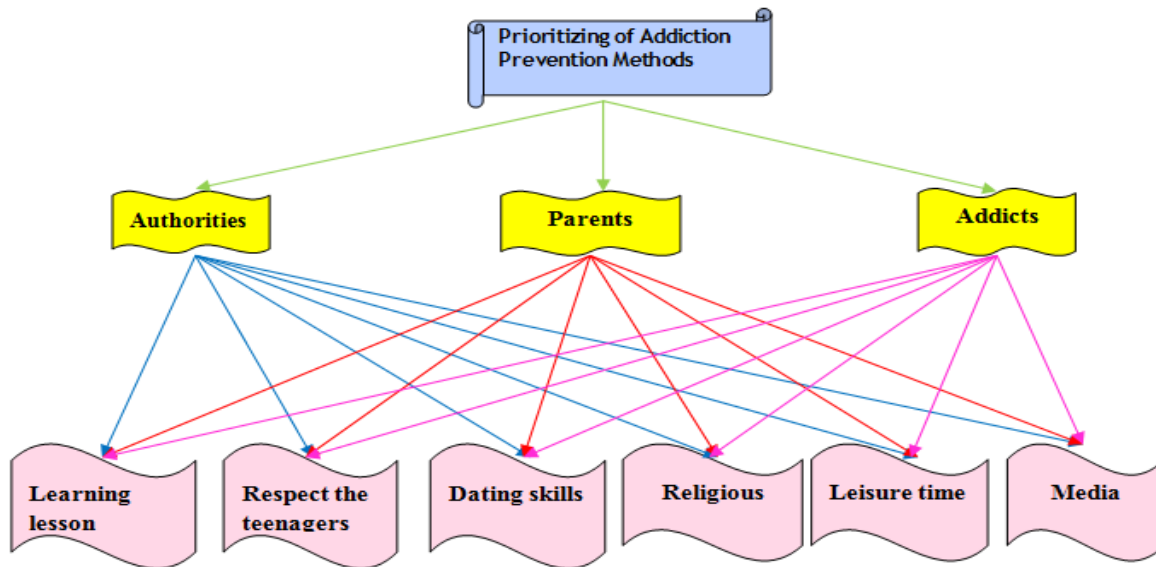| Example	Learning lesson	Respect the teenagers	Dating skills	Media	Religious	Leisure time	Mean total
Interviewees	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency
Authorities	5(40.29)	11(70.64)	5(29.40)	16(94)	3(17.64)	9(53)	8(48)
Parents	3(13)	5(21.73)	15(65.21)	21(91.30)	4(17.39)	5(21.73)	9(38.39)
Addicts	15(71)	24(57)	14(33.33)	24(5)	19(45.23)	18(42.85)	19(45.14)
Mean total	23(26)	40(47.71)	34(42.64)	61(80.76)	26(26.75)	32(39)	36(42.84)

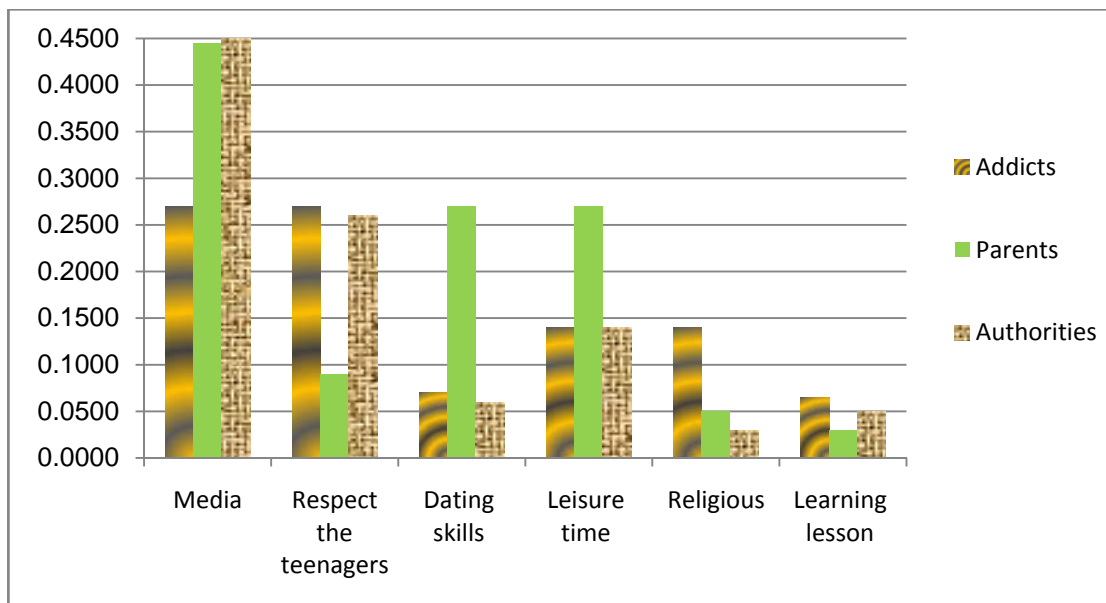Figure 1. Prioritizing hierarchal structure of addiction prevention methods

Figure 2. The relative weight of addition prevention methods from the view of the parents, authorities and addicts

Table 4. Paired and normalized comparison matrix and weight vector of the criteria

Criteria	Authorities	Parents	Addicts	Weight vector
Authorities	1	0.5	0.2	0.117
Parents	2	1	0.25	0.201
Addicts	5	4	1	0.680
Total	8	5.5	1.45	1

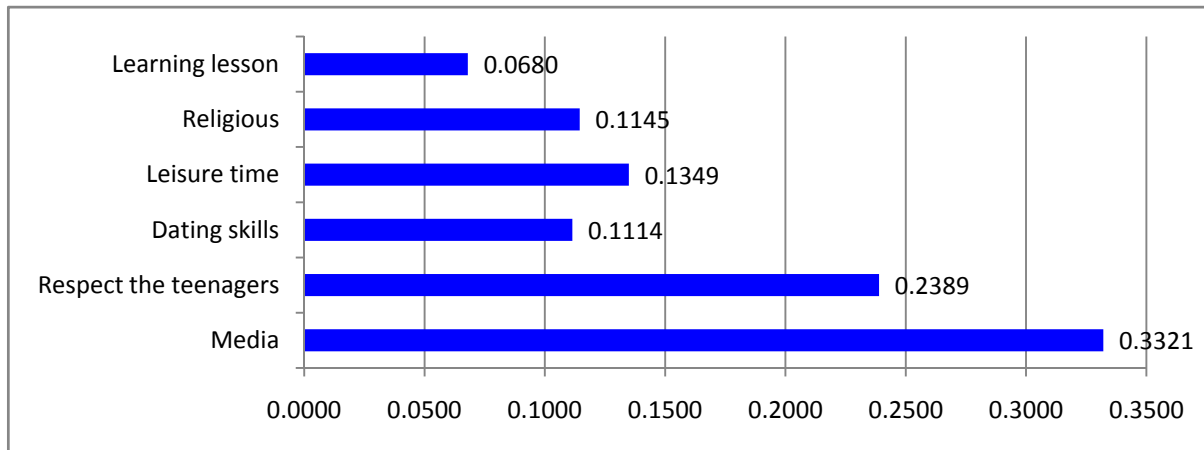Consistency rate: 0.0017 consistence matrix is acceptable

Figure 3. Final weight of addition prevention methods and prioritizing them

Through weighting method to the effective methods on addiction prevention and regulating them based on importance, paired and normalized comparison matrix were formed with 9 score for the criteria and 36 for the alternatives (Table 4). The obtained results from comparative reviewing of addiction prevention and prioritizing of these factors are illustrated in figures 2 and 3.

Final weight of addiction prevention methods in its AHP would be obtained from multiplying total weight of the criteria in weight of the alternatives; the obtained results are described as equations 6 to 11 and also figure 3.

Equation 6: Media weight: $(0.45 \times 0.118) = (0.488 \times 0.201) + (0.277 \times 0.681) = 0.3321$

Equation 7: Weight of respecting the teenagers: $(0.261 \times 0.118) + (0.095 \times 0.201) + (0.277 \times 0.681) = 0.2389$

Equation 8: Dating weight: $(0.058 \times 0.118) + (0.273 \times 0.201) + (0.072 \times 0.681) = 0.1114$

Equation 9: Weight of leisure time: $(0.145 \times 0.118) + (0.093 \times 0.201) + (0.146 \times 0.681) = 0.1349$

Equation 10: Weight of religion: $(0.033 \times 0.118) + (0.057 \times 0.201) + (0.146 \times 0.681) = 0.1145$

Equation 11: Weight of lesson learning: $(0.053 \times 0.118) + (0.035 \times 0.201) + (0.081 \times 0.681) = 0.068$

Discussion

The interviewed people mentioned the most important addiction prevention methods as respecting the teenagers, religious factors, media, dating skills, learning lesson and attention to leisure time (Table 3) among which the most effective method was mentioned to be acculturation of media and they believed that media is the most effective way to prevent

addiction. They pointed out to the press, TV and radio, and among them TV was mentioned as a more effective and efficient way; because publicity of the media as a national media is available to the public and it is not dedicated for a special group or class of people and everyone can use it regardless of his literacy and knowledge level.

The results of the present study was in accordance with the studied researches by Savad Kouhei et al.,[4] Younesi and Mohammadi,[5] Asghar Kia and Hossein Pour[28] which emphasized the role of TV in training. Television can help preventing from addiction in the society by making documentary TV series about learning lesson, educational program appropriate with age of the children and teenagers and also showing health messages in education and training field. Furthermore, TV as a mass media would provide necessary trainings to the parents about how to behave with the teenagers and youths. Many of the interviewed people mentioned the cause of their addiction to be disregarding and lack of respect of the parents and relatives and even insulting them; these individuals would suffer from depression and lack of confidence due to humiliation and insult and ultimately they tended to drugs to escape from the reality. Their assessment toward the effect of learning lesson was positive and they emphasized the role of camps in training. Visiting the camps by the students and familiarity with addicts' suffering can be included in schools' extracurricular programs as it is included in curriculum of other countries too.[29]

In this study, analysis hierarchical process

method was used to prioritize addiction prevention methods. This is a simple computational model on the matrices which begins with identifying and prioritizing elements of decision making.[30] The main advantage of AHP is that it would help decision makers to summarize a complicated issue into a hierarchical analysis and then solve it.[31] Moreover, the nature of AHP would bring about a clear logic to choose different alternatives.[32] The results of this study confirmed the application of this method through prioritizing addiction prevention methods. The results indicated that among the most important addiction prevention methods in this study, media and respecting the teenagers with weights of 0.3321 and 0.2389, respectively, had the highest priority to prevent addiction. Leisure time also with the weight of 0.1349 had lower importance than media and respecting the teenagers; however, it had a higher priority than religion, dating and learning lesson. Therefore, to implement addiction prevention projects in Delfan City, primarily the media and respecting the teenagers and subordinately leisure time had the most importance and they would have the highest productivity if implemented. On the contrary, religion, dating and learning lesson

with the weights of 0.1145, 0.1114 and 0.0680, respectively, had the lowest priority and they can be considered in later stages.

The following recommendations can be used in results of this study: paying more attention to the young generation and giving responsibilities to them, teaching parents about addiction damages and the method of prevention using different trainings through media, press and school, paying more attention to the cooperation of seminary and education department, because seminary, as an effective center in religious trainings can prevent from addiction, more attention to the role of media, because it has a more effective impact and TV can be considered as the most effective method, and finally, trying to give more attention to extra-curricular activities including recreational and scientific programs and it should not be allowed to replace these leisure times with destructive activities. The present study cannot be generalized to other provinces and cities; therefore, it is suggested to conduct such a study in other cities, furthermore, using AHP model is recommended to the managers, educational administrators and planners in order for necessary decision makings.

Conflict of interest: The Authors have no conflict of interest.

References
1. Mohammadi MA, Shiani M. Strategies for prevention of drug abuse. School based programs. Refah-e-Ejtemaee 2007; 6(25): 59-83.
2. Miller TR, Levy DT, Spicer RS, Taylor DM. Societal costs of underage drinking. J Stud Alcohol 2006; 67(4): 519-28.
3. Seifeddini MR. Challenges and prospects drug addiction and abuse it. Journal of Police Human Development 2008; 5(5): 56-98.
4. Savad Kouhi AA, Arjmand Hesabi M, Norouzi RA. Recognition of the acceptance procedures to prevent drug abuse and provide the desired pattern. Rehabilitation 2006; 7(3): 50-61.
5. Younesi J, Mohammadi MR. Approach used in publishing information on drug abuse prevention programs among adolescents. Journal of Shahed University 2006; 13(16): 1-10.
6. Mooney LA, Knox D, Schacht C. Understanding Social Problems. Boston: Cengage Learning, 2006.
7. Verdi Nia AA. Sociological study of drug addiction in Iran. Refah-e-Ejtemaee 2006; 5(20): 193-212.
8. Robertson EB, David SL, Rao SA, National

Institute on Drug Abuse. Preventing drug use among children and adolescents: a research-based guide for parents, educators, and community leaders. New York: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse; 2003.
9. National Institute of Drug Administration in cooperation with the International Relations Committee;. U.S. national drug control strategy. Washington, DC: The White House; 2003.
10. Hadi Bahrami E. Addiction and prevention process. Tehran: Samt Publication; 2009.
11. Chen YW. Implementing an Analytical Hierarchy Process by Fuzzy Integral. International Journal of Fuzzy Systems 2001; 3(3): 493-502.
12. Riggs NR, Elfenbaum P, Pentz MA. Parent program component analysis in a drug abuse prevention trial. J Adolesc Health 2006; 39(1): 66-72.
13. Longshore D, Ghosh-Dastidar B, Ellickson PL. National Youth Anti-Drug Media Campaign and school-based drug prevention: Evidence for a synergistic effect in ALERT Plus. Addict Behav 2006; 31(3): 496-508.

14. Faggiano F, Galanti MR, Bohrn K, Burkhart G, Vigna-Taglianti F, Cuomo L, et al. The effectiveness of a school-based substance abuse prevention program: EU-Dap cluster randomised controlled trial. Prev Med 2008; 47(5): 537-43.

15. Sloboda Z, Stephens RC, Stephens PC, Grey SF, Teasdale B, Hawthorne RD, et al. The Adolescent Substance Abuse Prevention Study: A randomized field trial of a universal substance abuse prevention program. Drug Alcohol Depend 2009; 102(1-3): 1-10.

16. Saaty TL. The analytic hierarchy process: planning, priority setting, resource allocation. New York: McGraw-Hill International Book Co; 1980.

17. Saaty TL. Axiomatic Foundation of the Analytic Hierarchy Process. Management Science 1986; 32(7): 841-66.

18. Saaty TL. Highlights and critical points in the theory and application of the Analytic Hierarchy Process. European Journal of Operational Research 1994; 74(3): 426-47.

19. Cimren E, Catay B, Budak E. Development of a machine tool selection system using AHP76. The International Journal of Advanced Manufacturing Technology 2007; 35(3-4): 363-76.

20. Bowen W. Subjective judgments and data envelopment analysis in site selection. Computers, Environment and Urban Systems 1990; 14(2): 133-44.

21. Dyer RF, Formen EH. An Analytical Approach to Marketing Decisions. New Jersey: Prentice-Hall; 1991.

22. Ma J, Scott N, Degloria S, Lembo A. Siting analysis of farm-based centralized anaerobic digester systems for distributed generation using GIS. Biomass and Bioenergy 2005; 28(6): 591-600.

23. Lopez HJ, Zinck JA. GISassisted modelling of soilinduced mass movement hazards: a case study of the Upper Coello River Basin, Tolima, Colombia. ITC Journal 1991; 4: 202-20.

24. Ghodsei Pour H. Analytical Hierarchy Process (AHP). Tehran: The University of Amir Kabir; 2008.

25. MarIa JE, Enez MJ, Joven JA, Pirla AR, Lanuza AT. A Spreadsheet Module for Consistent Consensus Building in AHP-Group Decision Making. Group Decision and Negotiation 2005; 14(2): 89-108.

26. Bertolinia M, Braglia M, Carmignani G. Application of the AHP methodology in making a proposal for a public work contract. International Journal of Project Management 2006; 24(5): 422-30.

27. Dey PK, Ramcharan EK. Analytic hierarchy process helps select site for limestone quarry expansion in Barbados. J Environ Manage 2008; 88(4): 1384-95.

28. Asghar Kia A, Hossein Pour J. Attitude of media addiction. J 2007; 9(1): 29-57.

29. khradmand A, Zamani E, Hedayati N. Exploit the Developed countries experiences of primary school education to prevent drug addiction and implications for Iran. Addict & Health 2009; 1(1): 44-52.

30. Yue J, Chen B, Wang MC. Generating Ranking Groups in the Analytical Hierarchy Process. The Journal of the Operational Research Society 2006; 57(2): 190-201.

31. Shaw G, Wheeler D. Statistical Techniques in Geographical Analysis. New York, NY: Beekman Books, Incorporated; 1985.

32. Varnes DJ, International Association of Engineering Geology, Commission on Landslides and Other Mass Movements on Slopes. Landslide hazard zonation: a review of principles and practice. Paris: UNESCO; 1984.

تعیین عوامل و اولویت آن‌ها در پیش‌گیری از اعتیاد در شهرستان دلفان (لرستان)

داوود میرزایی¹، دکتر بی‌بی عشرت زمانی²، سید حجت موسوی³

چکیده

مقدمه: در دهه‌های اخیر سوء مصرف مواد مخدر یکی از مهم‌ترین معضلات جوامع انسانی بوده است و هزینه‌های هنگفتی را به جامعه تحمیل کرده است. ابتلای معتادان به بیماری‌های واگیردار، آثار زیان‌بار اجتماعی و اقتصادی، پر هزینه بودن و برگشت‌پذیری شیوه‌های درمانی سبب شده است تا پیش‌گیری از سوء مصرف مواد امری کم هزینه‌تر و مؤثرتر از درمان باشد.

روش‌ها: نمونه آماری شامل ۱۷ نفر مسؤول، ۴۲ نفر معتاد و ۲۳ نفر از والدین بودند که به روش نمونه‌گیری هدفمند انتخاب شدند. ابزار جمع‌آوری داده‌ها، مصاحبه ساختار یافته و نیمه ساختار یافته بود و آنالیز داده‌ها بر اساس روش کمی، کدگذاری و مقوله‌بندی صورت گرفت. در این پژوهش برای اولویت‌بندی راه‌های پیش‌گیری از فرایند تحلیل سلسله مراتبی (Analytical hierarchy process) استفاده شد. این تکنیک یکی از جامع‌ترین سیستم‌های طراحی شده برای تصمیم‌گیری با معیارهای چندگانه است؛ چرا که امکان فرموله کردن مسأله پیچیده را به صورت سلسله مراتبی فراهم می‌کند و همچنین امکان در نظر گرفتن معیارهای مختلف کمی و کیفی در مسأله را دارد.

یافته‌ها: مهم‌ترین راه‌های پیش‌گیری عبارت از استفاده از رسانه‌ها به ویژه تلویزیون، عبرت‌آموزی توسط معتادان و افراد درگیر، برنامه‌ریزی برای اوقات فراغت، آموزش مهارت‌های اجتماعی به ویژه مهارت‌های دوست‌یابی، گنجاندن برنامه‌های آموزشی مرتبط با اعتیاد در مراسم مذهبی و احترام گذاشتن به نوجوانان می‌باشد. در این میان رسانه‌ها و احترام به نوجوانان به ترتیب با اوزان ۰/۳۳۲۱ و ۰/۲۳۸۹ بالاترین ارجحیت را برای پیش‌گیری از اعتیاد دارند. عامل اوقات فراغت با وزن ۰/۱۳۴۹ نسبت به عوامل رسانه و احترام به نوجوانان از اهمیت کمتر و نسبت به عوامل مذهب، دوست‌یابی و عبرت‌آموزی از ارجحیت بیشتری برخوردار است. در مقابل عوامل مذهب، دوست‌یابی و عبرت‌آموزی به ترتیب با وزن‌های ۰/۱۱۴۵، ۰/۱۱۱۴ و ۰/۰۶۸۰ کمترین ارجحیت را داشته‌اند و می‌توانند در مراحل بعدی مورد توجه قرار گیرند.

نتیجه‌گیری: افراد مورد مصاحبه، مهم‌ترین راه‌های پیش‌گیری از اعتیاد را احترام به نوجوانان، عوامل مذهبی، رسانه‌ها، مهارت‌های دوست‌یابی، عبرت‌آموزی و توجه به اوقات فراغت بیان کردند که در این میان مؤثرترین راه را فرهنگ سازی رسانه‌ای شناخته شد و معتقد بودند که رسانه‌ها مؤثرترین راه جهت پیش‌گیری از اعتیاد است. آن‌ها به مطبوعات، تلویزیون و رادیو اشاره کردند و در این میان تلویزیون را اثربخش‌تر و کارآمدتر دانستند؛ چرا که به علت همگانی بودن به عنوان رسانه‌ای ملی در دسترس عموم مردم قرار دارد و مختص به یک قشر و یا طبقه خاصی نیست و همه افراد صرف‌نظر از میزان سواد و آگاهی می‌توانند از این رسانه استفاده کنند.

واژگان کلیدی: عوامل اعتیاد، اولویت‌بندی، راه‌های پیش‌گیری، فرایند تحلیل سلسله مراتبی.

۱- دانشجوی کارشناسی ارشد، گروه برنامه ریزی آموزشی، دانشگاه اصفهان، اصفهان، ایران.

۲- دانشیار، دانشکده علوم تربیتی و روان‌شناسی، دانشگاه اصفهان، اصفهان، ایران.

۳- دانشجوی دکتری، گروه ژئومورفولوژی، دانشگاه اصفهان، اصفهان، ایران.

Email: bzamani@edu.ui.ac.ir   **نویسنده مسؤول:** دکتر بی‌بی عشرت زمانی